



3.0 Overview

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3.0 Overview

This chapter draws upon field observations and input from local government planning and park and recreation departments to evaluate the existing conditions of the Johnston County MST corridor. The purpose of this chapter is to determine opportunities and constraints for land-based and water-based trail development.

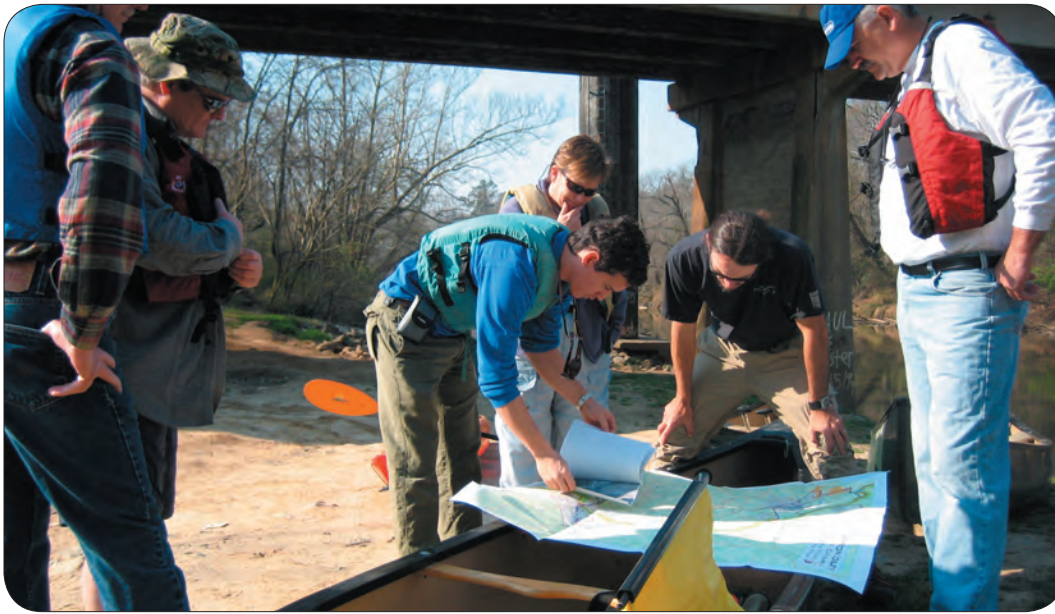
3.1 Opportunities

Generally, the opportunities include, A) Potential sites for canoe access, B) Connections to existing and potential trail corridors, and C) Connections to local downtown areas. Also, the Neuse River has significant potential to be better recognized as a regional destination for water-based trail recreation, such as canoeing, kayaking, and fishing. Altogether, twenty-seven specific opportunities are identified (starting on page 20), with maps showing the location of each. The water access points and trail corridors with the greatest near-term potential are noted below.

3.1.1 Potential River Access Points

1) A future Town of Clayton Parks and Recreation site will provide access on the west side of the river, approximately 2000 feet downstream from Covered Bridge Road (Opportunity #9 on pages 20 & 21). This site will also serve as a trailhead for the future Sam's Branch Greenway, and possibly the MST. While it is only two miles north of the existing water access point described below, this site is still important for water access as it is on a much larger parcel, offering greater opportunities for trail and trail head amenities.

2) The existing water access point at the NC 42 bridge (Opportunity #16 on pages 20 & 21) could be enhanced to become more user-friendly. The site currently has no trash receptacles, vulgar graffiti, and no signs to offer users information on water-based trail distance, safety, or natural/historical interpretation.



The first round of fieldwork started at the canoe access point below Highway 42 and SR 1705.

3) Another opportunity for river access exists on the north side of Fire Department Road (Opportunity #28 on pages 22 and 23). This site was originally proposed in the 2004 Conceptual Plan for the MST. The site provides a convenient mid-point between existing river access sites at NC 42 and Smithfield's Neuse Commons (approximately 5.5 miles from the existing access at NC 42, and approximately 8.5 miles to the existing access at Smithfield Commons). The site is large, cleared and level, but vehicular access from the road does not exist.

4) The NCDOT parcel just south of US Highway 70, on the east side of the river, may have potential for water access (Opportunity #38 on pages 24 and 25). The site will require further investigation as to specific potential access points on the parcel and possible site contamination from nearby tank farms. Because of the industrial nature of the surrounding area, opportunity #28 should be given a higher priority. However opportunity #38 should still be considered, as it brakes up the 8.5 mile stretch of river noted above.

The NCDOT parcel mentioned above was the southernmost site considered for new water access in the study area. The Neuse River Commons in Smithfield (less than three miles downstream) provides an adequate, existing facility for water access in that portion of the corridor.

3.1.2 Potential Trail Corridors and Connections

1) The future routing of Wake/Raligh trails will connect to Clemmons State Forest, offering a potential direct route for the MST into the Town of Clayton (Opportunity #3 on pages 20 and 21).

2) The Sam's Branch Greenway, running along a creek and sewer easement towards Downtown Clayton, will connect the MST to the town (Opportunity #10 on pages 20 and 21).

3) The Town of Smithfield has existing trails that are currently expanding through the Buffalo Creek Corridor (Opportunity #47 on pages 26 and 27). This trail system parallels the proposed MST route and should therefore be incorporated as part of the MST.

3.2 Constraints

The identified constraints consist primarily of A) Private property along the preferred routes, B) Noise pollution in several locations along the trail, and C) The proximity of hunting/game lands to the preferred route. Twenty-one individual constraints are identified throughout the project corridor, starting on the following page. Below some of the main constraints are addressed.

3.2.1 Private Property along Preferred Route

The issue of private property and public access is a fundamental aspect of greenway planning, and the MST in Johnston County is no different. Strategies for creating win-win situations between land owners and trail advocates are used successfully in communities all across the United States. More information about such strategies can be found in this plan's chapter on implementation. Also, the many economic benefits and public purposes of greenways are well defined in Chapter 2, specifically addressing the increased property value associated with trails and greenways.

3.2.2 Noise and Visual Pollution

The noise pollution experienced during the field work along the Neuse River was from three primary sources: new home construction, trucks and automobiles on bridges, and the water treatment plant. The visual pollution along the corridor consisted mainly of utility structures and new homes with no landscape buffer facing the river. Some of these negative aspects may simply be unavoidable, such as noise from cars and homes with river views. However some solutions may exist: Coordination with treatment plant officials may result in a reduction of noise-producing operations during special river- and trail-related events; also, construction of the trail can include landscaping elements that shield utility structures from trail users, and may even reduce some associated noise pollution.

3.2.3 Hunting and Gameland Proximity

Existing dirt roads and pathway corridors were noted along the east bank of the river (Constraint #32 on pages 24 and 25), several of which feature deer blind towers. If public access is gained along the preferred route, particular attention should be given to avoiding any potential conflict between hunters and trail users.

Existing Conditions Maps

The project corridor is broken down into four sections for further analysis. Nearly fifty individual opportunities and constraints are listed in the following pages, with a map for each section that shows the location of each opportunity or constraint. These maps also show the Neuse River, its floodway and floodplain, tributaries and creeks, incorporated areas, major roads, and parcel lines.

EXISTING CONDITIONS : COUNTYLINE To NC 42

- 1 Opportunity:** The Town of Clayton has access along the east side of the river through a planned unit development (PUD), from near the countyline, downstream to Mark's Creek.
- 2 Constraint:** Johnston County land cover data identifies marsh areas here, along the south and west side of the river.
- 3 Opportunity:** Future routing of Wake/Raligh trails will connect to Clemmons State Forest.
- 4 Opportunity:** Connecting the MST to the Mark's Creek corridor would be a huge asset to the trail system. The nearby Mark's Creek rural lands are identified as a regional land conservation focus area.
- 5 Constraint:** Shallow water in the floodplain, just south of Mark's Creek, serves as an obstacle to the trail.
- 6 Opportunity:** Subdivision connected to the river with future Town of Clayton property; potential to connect to downtown with the MST.
- 7 Opportunity:** An existing Town of Clayton sewer easement provides a cleared and level corridor along the east side.
- 8 Opportunity:** Covered Bridge Road at the Neuse River has been identified by the Town of Clayton as potential site for a bike/ped bridge.
- 9 Opportunity:** Future site for river access and a major trail head, currently owned by the Town of Clayton.
- 10 Opportunity:** The Sam's Branch Greenway will run along this floodplain, connecting Downtown Clayton to the MST.
- 11 Opportunity:** Future Little Creek Greenway to T.O.C. Park.
- 12 Opportunity:** Connect to Downtown Clayton. The town will serve as an attraction along the route, and those living in the area will have access to the trail system.
- 13 Opportunity:** Future Town of Clayton Property.
- 14 Constraint:** A golf course is on the east side of the Neuse.
- 15 Constraint:** A golf course is on the west side of the Neuse.
- 16 Opportunity:** An existing water access point is located here, at the NC 42 bridge. The site could be enhanced to be more user-friendly.
- 17 Opportunity:** The Town of Clayton and NCDOT are working together to provide a bike/ped sidepath that would run along the south side of NC 42



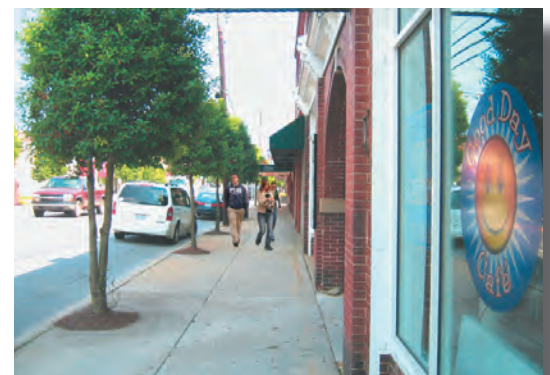
Shallow water in the floodplain, just south of Mark's Creek.



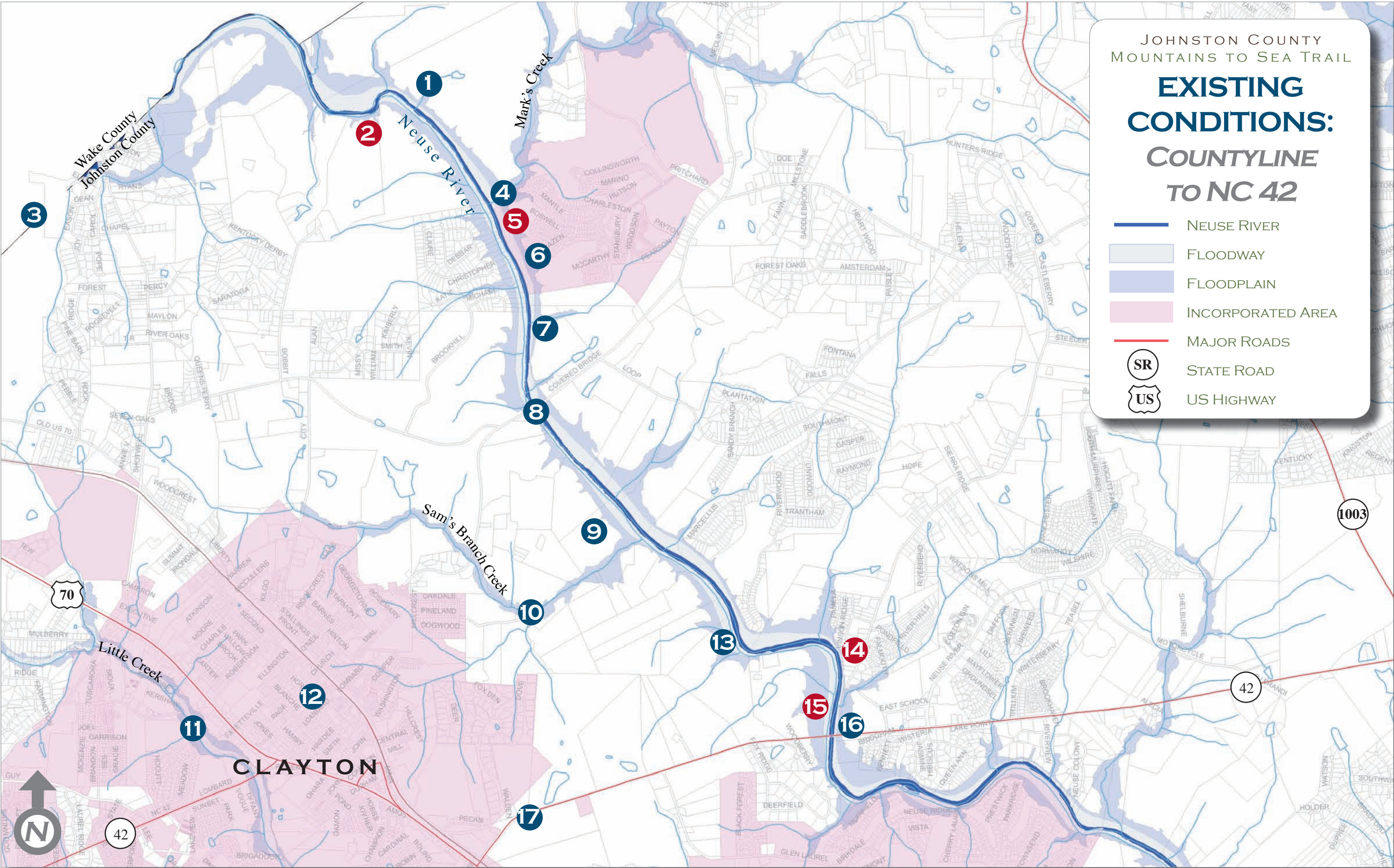
Mark's Creek.



Sam's Branch.



Downtown Clayton.



EXISTING CONDITIONS : NC 42 TO FIRE DEPT. ROAD

- 18

Opportunity: The NCDOT Division of Bicycle and Pedestrian Transportation recommends that the NC 42 bridge accommodate bicycles and pedestrians when it is replaced, in addition to enhancements to the existing river access underneath the bridge.
- 19

Constraint: A subdivision with parcels abutting the river.
- 20

Opportunity: An alternate route to the private trail along the river may be available as a sidepath along NC 42, and then south along this floodplain and back to the river.
- 21

Opportunity: The Town of Clayton has a greenway underway along this small creek, connecting the incorporated subdivision to NC 42.
- 22

Constraint: A private trail runs along the east bank of the Neuse, through an existing subdivision.
- 23

Constraint: A subdivision with parcels and a golf course abutting the river.
- 24

Opportunity: A small Town of Clayton parcel is located here, on the west side of the river.
- 25

Constraint: New subdivision construction abutting the river.
- 26

Constraint: A subdivision with parcels abutting the river.
- 27

Constraint: A subdivision with parcels abutting the river.
- 28

Opportunity: The bridge at Fire Department Road (aka Wilson Road) provides an excellent opportunity for a major trail head location. Access to the northern quadrant (shown a bottom, right) will require a small side road, due to the long approach of the bridge. The site lies approximately halfway between the project corridor’s only two existing water access points: NC 42 bridge and Smithfield Commons.



An MST fieldwork team assembles under the existing NC 42 river access point.



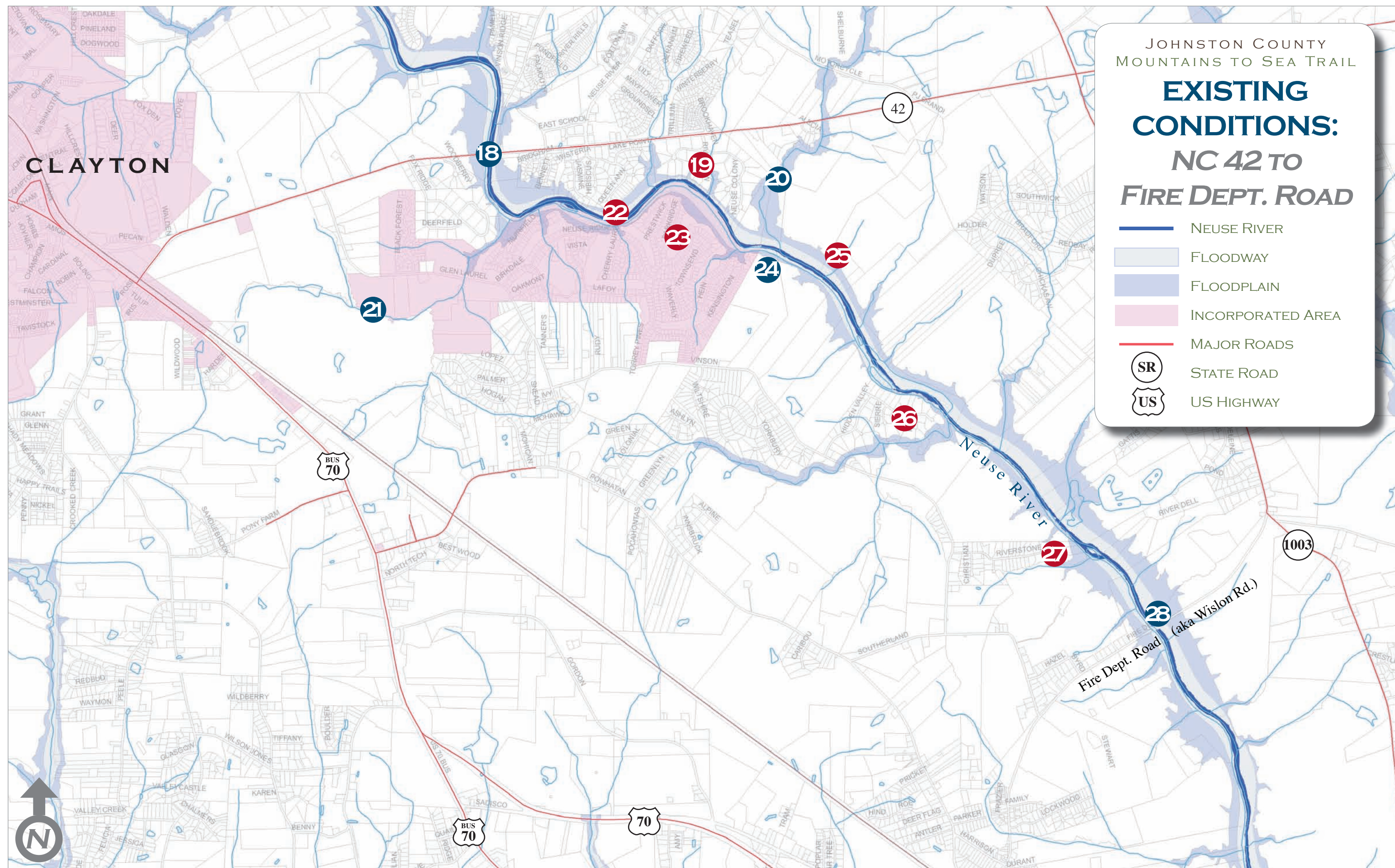
Existing private trail.



New subdivision construction along the river.



Bridge at Fire Dept. Road.



EXISTING CONDITIONS : FIRE DEPT. ROAD TO US 70

- 29

Opportunity: In the Lower Middle Section, parcels on the east side of the river are larger and less divided than those on the west side, offering more feasible opportunities for working with local land owners.
- 30

Constraint: The water treatment plant is a source of major noise pollution along this portion of the River corridor. While its location is on the west side of the river, the parcel is rather large and may have restrictions on public access.
- 31

Constraint: Trail surfacing options may be limited in this portion of the corridor due to the marsh paralleling the river.
- 32

Constraint: Some corridors exist here, along the eastern side of the river. Well-maintained deer blind towers, however, suggest they are currently used for hunting.
- 33

Constraint: This is the future site of a large Town of Selma Quarry. Public access through and/or adjacent to quarries is usually prohibited due safety precautions.
- 34

Constraint: Steep slopes along this portion of the trail may present some difficulty in trail development. At the same time, these locations may offer unique views of the river and will provide some trail users with a section for incline training along the slope.
- 35

Constraint: US 70 and the railroad serve as significant constraints to routing the trail east (in order to circumvent the quarry and the prison). Such a route would require potentially dangerous at-grade crossings, or expensive grade-seperated crossings.
- 36

Constraint: This is the site of the State of North Carolina Department of Corrections. Public access will be limited at best near this facility.
- 37

Opportunity: A parcel owned by the North Carolina Department of Transportation (NCDOT) is located here, with access to the Neuse River. The NCDOT is an active supporter of the MST.
- 38

Opportunity: A second, much larger NCDOT parcel also has access to the Neuse River here, just south of the US 70 bridge. This site may require further study in regards to potential pollution from the nearby tank farms.
- 39

Constraint: This is a largely industrial area with frequent train stops and large trucks serving the tank farms.
- 40

Opportunity: Town of Smithfield greenways will connect most easily to trail located on the *east* side of the river.
- 41

Opportunity: Connect to Historic Downtown Selma. As noted for Clayton in the Northern Section, a long standing goal of the MST is to connect the trail and trail users with the cities and towns along the way.



Johnston County water treatment plant on the Neuse River.



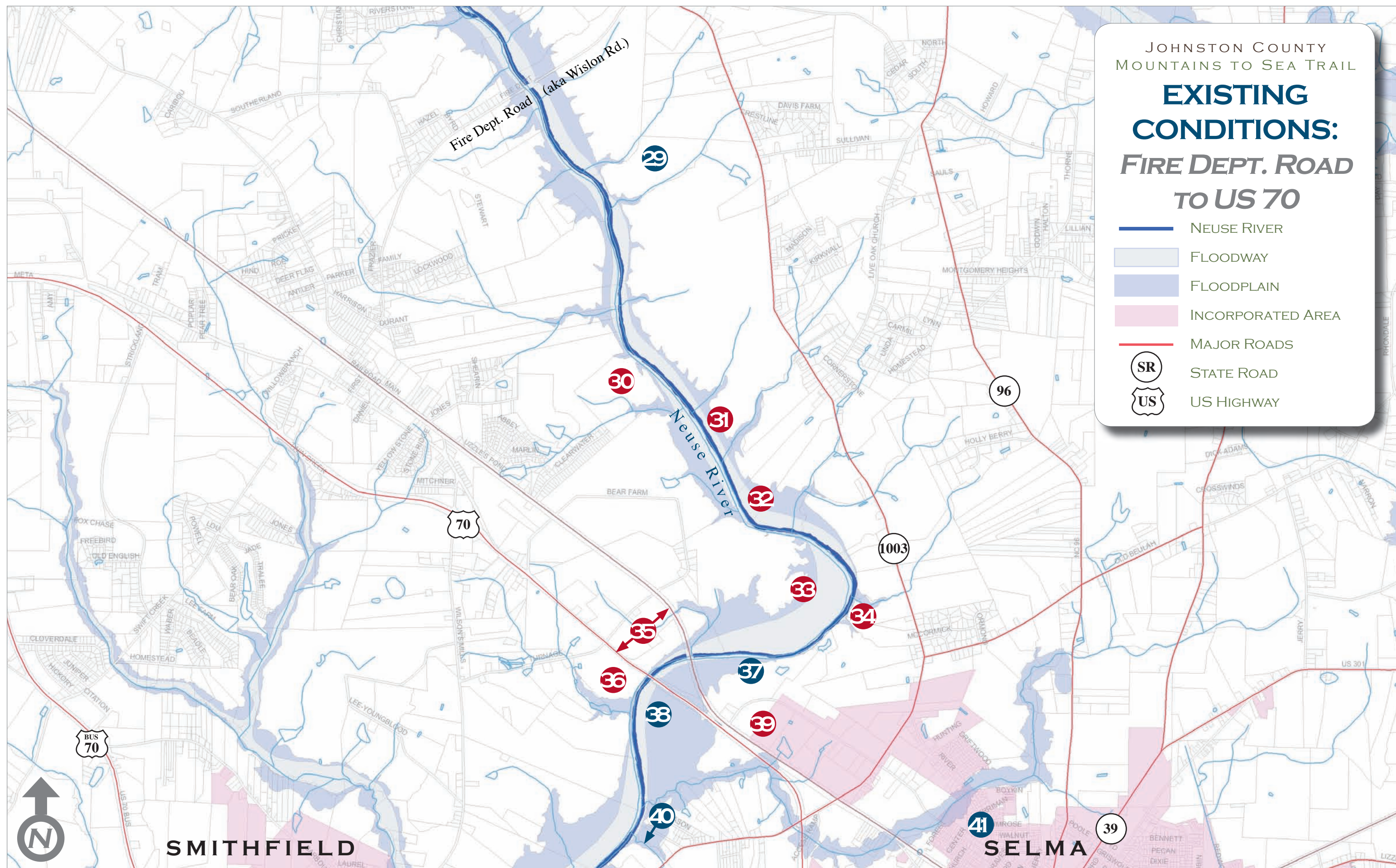
Existing corridor along the river.



Steep slopes along the bank.



Railroad bridge near US 70.



EXISTING CONDITIONS : US 70 TO I - 95

- 42

Constraint: Private land use along Neuse River will be especially prohibitive of public access in ares where residents have staked their claim to the land in the form of gazebos, fishing cabins, and other structures, as they have done in this area
- 43

Constraint: Livestock grazing along the river pose challenges to public access, though many incentives exist to land owners who wish to preserve their working lands. Organizations such as American Farmland Trust are made up of farmers and conservations who work together for win-win situations.
- 44

Constraint: Sixteen individual parcels are located along this small portion of the Neuse River. An alternative route will circumvent the challenges associated with negotiating access through so many parcels for a relatively short distance of river access.
- 45

Opportunity: The Neuse Riverwalk and river access at Smithfield Town Commons offer a positive start for establishing both the MST water based-trail, and the land based trail.
- 46

Opportunity: Connections into Downtown will provide an excellent opportunity for MST users to visit Historic Smithfield, and for Smithfield residents to enjoy the trail.
- 47

Opportunity: A new Town of Smithfield greenway is currently underway within existing easements along the Buffalo Creek Corridor.
- 48

Opportunity: Although not yet officially recognized, this is area is known as a Native American cultural site, with natural springs. Such a site could serve as a unique interpretive park along the MST.



Private structures along the river bank.



Livestock grazing along the river bank.



Smithfield Commons



Downtown Smithfield

